ovoid, small (0.5×0.25 mm), the testa brown, reticulate (Figs. 1-6).

Holotype : *Joseph* 39716A at Krishna 36 km from Bhallukpong, alt. about 1250 m on the way to Sessa, Kameng district, N.E.F.A. In shady moist places near the way side, on black humus soil, 10 September 1964 (CAL). Isotypes: *Joseph* 39716 B-F of the same gathering (ASSAM). Paratypes: *N. L. Bor* 18179 Aka Hills, 1936; *G. K. Deka* s.n. (B.S.I. Accsn. No. 29477) Balipara F. T. 13.11.51 ; *A. R. K. Sastry* 40738 on way from Palim to Sayata, Subansiri district, N.E.F.A. on hilly slopes of damp forest floor and along small streams with *Impatiens*, on black clayey soil, 19.11.1964.

Mr. B. L. Burtt of the Royal Botanic Gardens, Edinburgh who studied the two sheets of Deka and Bor, noted that the specimens belonged to an undescribed species. He further noted that "neither of these sheets would be adequate for description as a new species". Subsequent fuller collections of J. Joseph from Kameng and A. R. K. Sastry from Subansiri proved to be identical material. This has now offered the opportunity to describe the new species.

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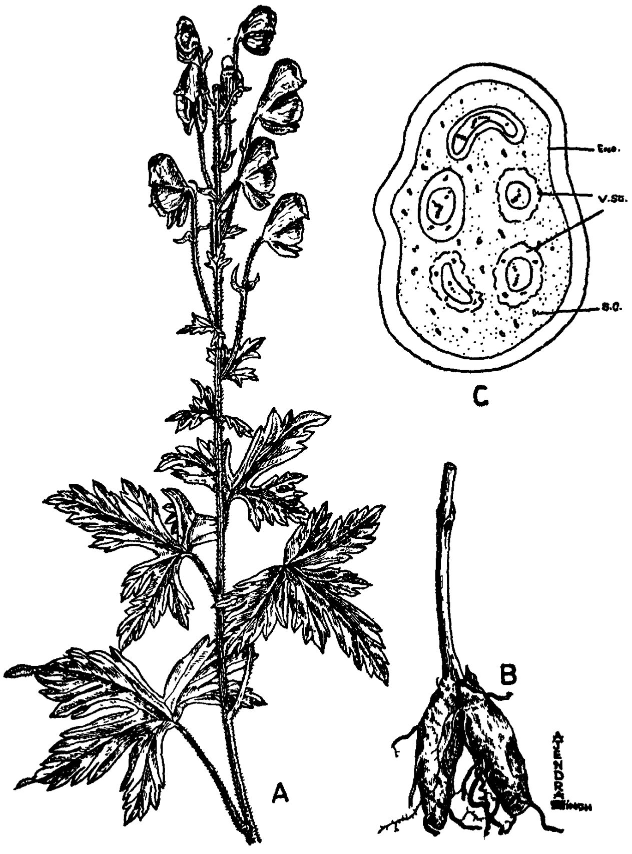
A NOTE ON THE OCCURRENCE OF *ACONITUM DEINORRHIZUM* STAPF IN NORTH-WEST HIMALAYAS

Aconitum deinorrhizum Stapf (Ranunculaceae) the roots of which constitute one of the commercial aconites of India has, rarely, been recorded in the past from north-west Himalayas. The previous record of the species is from Janikanda in Rampur Bashahar (Himachal Pardesh), and the specimen has been used by Stapf (1905) as a type for giving the plant its present name. Stapf has further recognized the specimens collected by Madden from Shatul and Boorun Passes and mentioned under *A. ferox* as *Aconitum deinorrhizum* Stapf. It is surprising that no floristic record of the species or the extent of its distribution has yet been made, although the drug derived from the plant reaches the indigenous crude drug markets in fairly large quantities. Investigations in various herbaria revealed a very scanty representation by a few old preserved specimens of Aitchson's collections from Chamba. Reference of the plant in the existing literature also is scanty as well as confusing. In the Wealth of India (1948) the distribution of the plant is given as from Kunawar to Nepal but the plant has not been recorded yet from any locality in Jaunsar, Garhwal and Kumaon Himalayas. This fact has been further confirmed during a survey of commercial aconites in north-west Himalayas by the authors, who found that the crude drug derived from the plant comes only from Jammu and Kashmir and Himachal Pradesh.



Aconitum deinorrhizum Stapf

Figs. A-C : A. Areal portions with flowers. B. Mother and daughter tubers. C. T. S. through the root.
(*S.C.*—Stone cells; *End.*—Endodermis; *V. st.*—Vascular strand)

During a survey of medicinal plants in north-west Himalayas an extensive colony of *A. deinorrhizum* was encountered in the alpine regions (3400 to 3600 m) of Chattardhar and Bhalesh ranges of Bhadarwah Tehsil in Jammu and Kashmir. The colony further extends towards Bhandal range in Chamba. The description of the plant as given below confirms to that of *A. deinorrhizum* originally described by Stapf while naming the species.

Aconitum deinorrhizum Stapf in Ann. Bot. Gard. Calc. X. 158.

A tall slender herb; stem 2 metre or more high, erect simple, terete, younger parts crispopubescent, older glabrous shining, dark maroon or reddish in colour; leaves upto 10 or 12, scattered petiole slender with a bulbous base, blades reniform with a broad sinus, 3 to 5 lobed, lobes upto 8 cm; inflorescence straight, upto 50 cm long, simple or more often giving out a branch from near its base; flowers large blue, sepals helmet shaped, helmet more or less oblique; nectaries hispidulous all over, filaments hairy on the upper part, 8 to 10 mm, winged beyond the middle; carpels three; roots, tuberous, paired, tapering abruptly beyond three-fourth of their length; mother tuber 10 to 12 cm long and 3 to 5 cm thick when fresh; daughter tuber conical, rather elongated (Fig. B).

A transverse section (Fig. C) studied for confirming the identity shows primary cortex with stone cells scattered here and there. Embedded in the secondary phloem of the inner bark is found the discontinous cambium broken into a number of vascular strands. Some of these form a ring while others are flattened into U-shaped structures.

Seojdhar, Bhadarwah, 3400 m, *YKS.* No. 8159, October 1964.

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ON THE IDENTITY OF *BOERHAVIA PUNARNAVA* SAHA ET KRISHNAMURTHY

Boerhavia punarnava Saha et Krishnamurthy has been described in the Journal of Scientific and Industrial Research (*Saha & Krishnamurthy* 1961) as a new species on the basis of a type collected by J. C. Saha from Pondicherry (India). Subsequently this taxon has been recorded from Kerala (*Nair & Nair* 1964) and Maharashtra (*Ramarethinam* 1964).

While proposing the new species the authors have shown how the taxon differs from other Indian species of the genus. A careful study of the description and illustrations of *B. punarnava* revealed that in none of the characters given by the authors is this species different from that of a Linnaean species, *B. erecta* Linn. Therefore, a scrutiny of the type of *B. punarnava* (*Saha* 1961) deposited in Central National Herbarium, Calcutta, was made. This specimen was compared with authentic specimen of *B. erecta* Linn. collected from Java by C. A. Backer (No. 23144) in October 1917 and deposited in Central National Herbarium, Calcutta. Both were found identical. Obviously, Saha while comparing his specimen in the Central National Herbarium overlooked the specimen of Backer.

Since *B. punarnava* and *B. erecta* are one and the same the former becomes a superfluous name. The nomenclature of the plant is as follows:

Boerhavia erecta Linn. Sp. Pl. 3, 1753. *B. punarnava* Saha et Krishnam. in J. Sci. Industr. Res. 21C: 254, 1961.

The plant is easily distinguished by its fruit which is non-glandular and truncate at the apex. It is a weed of tropical America and is spreading throughout the tropical countries. In India it appears to be a new introduction and is generally found near road sides, railway tracks and waste places.

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